

State of Missouri Department of Natural Resources Air Pollution Control Program P.O. Box 176 Jefferson City, MO 65102

For Office Use Only	
Facility Name:	Permit No.:
Facility ID No.:	Effective Date
	Expiration Date:

GENERAL PERMIT/APPLICATION TO OPERATE A GRAIN ELEVATOR AND/OR GRAIN PROCESSING INSTALLATION

for

Option C - Intermediate State Based on Emission Worksheets

In compliance with the provisions of Missouri State Rule 10 CSR 10-6.065, this grain elevator and/or grain processing installation with potential emissions of less than 100 tons per year of particulate matter less than or equal to 10 microns in aerodynamic diameter (PM_{10}) is authorized to operate in the State of Missouri, in accordance with emissions limitations, operating requirements and other conditions set forth in this General Permit.

State of Missouri Department of Natural Resources - Air Pollution Control Program

GRAIN ELEVATOR AND GRAIN PROCESSING GENERAL AIR QUALITY OPERATING PERMIT APPLICATION -- INTERMEDIATE STATE --

(Option C)

Complete and submit to:
Missouri Department of Natural Resources
Air Pollution Control Program
P.O. Box 176
Jefferson City, MO 65102-0176

All applications must be submitted in duplicate and accompanied by a single \$100 filing fee.

Section I - GENERAL INFORMATION

A.	Installation Name	County No.	Plant No.	Year Submitte	ed		
	Installation Street Addres	SS			County Name		
	City State Zip Code				Installation Phone No.		
	Installation Mailing Addre	ess			Installation Fa	x No.	
	City	State	Zip Code				
Contact Person (Last) (First) (MI							
Contact Person Title 1/4				1/4 Section	on Towi	nship Ra	ange
B. Parent Company Name				Contact Perso	on	Phone No.	
	Mailing Address			City		State	Zip Code
C.	Installation Type (check of	or		inal Elevator			

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٠.	Caspan 25 Approasing.
	If a grain elevator, does your installation have grain storage capacity greater than 2.5 million bu. and have any affected facilities as noted in the first page of the instructions that commenced construction, modification, or reconstruction after August 3, 1978? Yes \(\Boxed{\text{No}}\) No
	If you checked "yes" above, go to Section 6.02 2. of the General Permit (Section VII) to check the "applicable" boxes for Missouri State Rule 10 CSR 10-6.070, New Source Performance Standards, Subpart DD and for the affected facilities at your installation.
E.	Type of Application (If this is the first time, check "initial."): ☐ Initial ☐ Renewal (Current Permit No) ☐ Minor Permit Modification ☐ De Minimis Modification ☐ Administrative Amendment

SECTION II - EMISSION INVENTORY. If your installation has not previously submitted the annually required Emission Inventory Questionnaire Forms, you need to obtain these forms and submit them with this application in duplicate. Otherwise, you do not need to submit these forms. Amendments or changes to a previously submitted EIQ must be submitted at the same time as the general operating permit application. The additional EIQ forms must clearly state that they are replacement or additional forms.

SECTION III - POTENTIAL EMISSIONS. See instructions.

Option C:

D. Subpart DD Applicability:

Intermediate State Installations -- Emissions Based upon Individually Calculated Receiving or Production Limits and/or Particulate Control Device Requirements. There are worksheets to determine new limits or requirements for grain elevators and feed mills. Refer to the Instructions, if necessary, for guidance in completing the applicable worksheet(s). Complete the following "emission worksheets" as applicable. Be sure to include present permit limits or requirements when calculating your emissions.

- 1. Terminal Elevator Emission Worksheets are in Attachment A.
- 2. Country Elevator Emission Worksheets are in Attachment B.
- 3. Feed Mill Emission Worksheets are in Attachment C.
- 4. Combustion Unit Worksheet is in Attachment D.
- 5. New Permit Conditions. Enter below "new" receiving or production limits (Table 1), fuel oil combustion limits (Table 3), or pollution control requirements (Table 2) that you entered in the emission worksheets. These are limits and requirements that are necessary to maintain your potential PM₁₀ emissions and possibly other emissions below 100 tpy. Also, if applicable, be sure to check the "applicable" boxes in Sections 7.01 2., 8.02, and 9.02 of the General Permit (Sect. VII).

NOTE: If sulfur dioxide potential emissions are less than 100 tons per year considering the highest sulfur content as determined by the worksheet, then a sulfur content limit for the fuel oil will not be required except in the City of St. Louis and St. Louis, St. Charles, Jefferson and Franklin Counties. Also, if the potential emissions of the fuel oil combustion unit(s) were considered in the worksheet, and sulfur dioxide potential emissions were less than 100 tons per year, then a "new" fuel oil combustion limit will not be required.

Table 1 - New Receiving and/or Production Limits				
Installation or Process Type	Grain Receiving or Processing Limit (Bu./Yr.)	Feed Production Limit (Tons/Yr.)		
Country Grain Elevator				
Terminal Grain Elevator				
Grain Elevator/Feed Grind & Mix				
Feed Mill				

Table 2 - New Particulate Control Device Requirements					
Control Device Type	Emission Unit I.D. #				

Table 3 - New Fuel Oil Combustion Limits				
Combustion Unit	Fuel Oil Limits			
Description & Emission Unit ID	Gallons/Yr.	Sulfur (%)		

Section IV - Existing Permit Conditions. Please note in the tables below existing permit conditions that limit production or process throughputs, amount and type of fuel combusted, or that require the operation of a pollution control device (do not include watering haul roads). These would be found in your State or local agency-Issued "Permits to Construct." Also, be sure to note that these same limits and requirements are applicable by checking the "applicable" box in Sections 7.01 (if Table A is applicable), 8.01 (if Table B is applicable) and 9.01 (if Table C is applicable) of Section VII - General Permit.

	Table A - Existing Particulate Control Device Permit Requirements				
Permit No. & Control Control Device I.D. # Emission Units Controlled Emission Unit I.D. #					

	Table B - Existing Receiving, I	Processing or Production Po	ermit Limits
Permit No. & Condition No.	Installation or Process Type	Grain Receiving or Processing Limit (Bu./Yr.)	Feed Production or Processing Limit (Tons/Yr.)
	Country Grain Elevator		
	Terminal Grain Elevator		
	Grain Elevator/Grind & Mix Feed		
	Feed Mill		
	Other Process (specify):		
	Other Process (specify):		
	Other Process(specify):		

	Table C - Existing Fuel Combustion Permit Limits					
Permit No. &	Fu	Fuel Oil Limits				
Condition No.	Description & Emission Unit ID#	(Gallons/Yr.)	Limit (MMCF/Yr.)	Gallons/Yr.	Sulfur (%)	Other

Section V - Compliance Statement

A.	Compliance status with respect to all Applicable Requirements effective at time of Permit Issuar Section VII - General Permit under Section 6.0 - Applicable Requirements.; Section 7.0 - Pollution Requirements., if applicable; Section 8.0 - Production or Processing Limits., if applicable; and S Combustion Limits, if applicable.								
	Will	Vill your installation be in compliance with all applicable requirements at the time of permit issuance and continue to vith these requirements?							
		Yes □ No	(If yes, go to Subsecti	ion B. of this Section; if r	no, complete 1 4. below for eac chieved.)	h applicable			
	1.	Identify app	licable requirement for v	which compliance is not a	achieved:				
	2.	Narrative de	escription of how compli	iance will be achieved wi	th this applicable requirement:				
	3.	Detailed Sc	hedule of Compliance:						
			<u>Steps</u>		<u>Date E:</u>	<u>xpected</u>			
	4.	Frequency f	for submittal of progress	s reports (6 month minim	um)				
		Starting dat	e for submittal of progre	ess reports:					
		//							
B.	Co	mpliance sta	atus with respect to al	II Applicable Requirem	ents effective after permit issu	ance:			
	suc	ch requiremen	nts on a timely basis?		ments taking effect during the tern and 2. below for each requirement				
	1.	Identify app	licable requirement that	t you expect will not be co	omplied with:				
	2.	Detailed sch	hedule leading to compl	liance:					
			<u>Steps</u>		<u>Date E</u>	<u>xpected</u>			
				_					
"1 (certif	y, based on	cant's Certification information and belie accurate and comple	ef formed after reasona	ble inquiry, the statements and	d information in this			
Signat	ure o	of Responsib	ole Official of Compan	ny		Date			
Туре о	r Pri	nt Name of	Signer			_			
Official	Title	e of Signer_			Telephone No.	()			

Section VII - General Permit. Go through the General Permit and address all "check boxes."

GENERAL PERMIT TO OPERATE A GRAIN ELEVATOR AND/OR GRAIN PROCESSING INSTALLATION

Section 1.0 - Coverage Under This Permit

- 1.01 This installation shall qualify as an Intermediate State Installation as set forth in Missouri State Rule 10 CSR 10-6.065(1)(C).
- 1.02 This installation shall not qualify as a Basic State or Part 70 Installation as set forth in Missouri State Rule 10 CSR 10-6.065(1)(B) and (D).
- 1.03 The permittee shall be subject to an enforcement action for operating without an individual operating permit if it is later determined that the source does not qualify for this General Operating Permit. The permitting authority's decision to issue this permit is based on the representations made by the permittee in the General Operating Permit Application.

Section 2.0 - Permit Flexibility and Modifications

- 2.01 The permittee shall have the permit flexibility to make changes at the grain elevator and/or grain processing installation as long as the proposed change is not considered a permit modification or does not exceed the emission limitations in Section 6.0 of this permit. A permit modification includes any proposed change at the installation which increases the potential emissions of PM₁₀ equal to or greater than 100 tons per year. If the permitting authority considers the proposed change as a modification, the grain elevator shall be required to obtain an individual permit issued under Missouri State Rule 10 CSR 10-6.065(6) Part 70 Operating Permits.
- 2.02 The owner or operator shall provide the permitting authority written notice at least seven (7) days prior to the proposed change. The written notice shall include a brief description of the change(s) within the permitted installation, the date on which the change is to occur, and any change in emissions. The permitting authority will notify the owner or operator whether the proposed change can be completed or will be considered a permit modification and have to undergo the appropriate procedures before the proposed change can be completed.
- 2.03 A permit modification will not be considered a permit change that:
 - 1. Corrects typographical errors such as misspelled words, incorrect effective date, etc.;
 - 2. Allows for a change in ownership or operational control of a grain elevator and/or grain processing installation where the permitting authority determines that no other change in the general permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new permittee must be submitted to the permitting authority;
 - 3. Incorporates into this permit the requirements of a unified construction permit issued by the permitting authority as long as potential PM₁₀ emissions are less than 100 tons per year;
 - 4. Does not increase the potential emissions of PM₁₀ equal to or greater than 100 tons per year; or
 - 5. Any other change that the permitting authority determines to be of similar nature to those in this subsection.

Section 3.0 - Permit Renewal and Expiration

3.01 This permit is issued for a fixed term of five (5) years. The permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted.

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- 3.02 **Duty to reapply.** The owner or operator of the installation shall submit a timely and complete operating permit application for permit renewal in accordance with this section.
 - 1. **Timely application renewal.** For purposes of permit renewal, a timely application is one that is submitted

at least six (6) months prior to the date of permit expiration.

2. Complete application.

- a. An application will be deemed complete if it provides all the information required in the General Permit Application Form.
- b. The application for renewal shall include the current permit number, the appropriate renewal fee, description of any permit revisions and permit changes that occurred during the permit term, and any applicable requirements that were promulgated and not incorporated into the permit during the permit term.
- c. After receipt the permitting authority shall determine whether the application is complete and inform the applicant that it is complete within sixty (60) days after receipt of the application. If the permitting authority determines that the application is not complete, it shall inform the applicant promptly.
- d. An installation which has submitted a timely and complete application may continue to operate without a permit from the date the application is determined to be complete subject to final action by the permitting authority on the renewal application, provided that the applicant submits any requested additional information by the deadline established by the permitting authority.
- 3. **Permit expiration.** Permit expiration terminates the installation's right to operate unless a timely and complete renewal application has been submitted.

Section 4.0 - General Compliance/Enforcement Provisions

- 4.01 **Compliance Requirement..** The permittee must comply with the applicable requirements and all conditions of this permit. Any document (including reports) required to be submitted by this permit shall contain a certification by a responsible official.
- 4.02 **Noncompliance.** Any permit noncompliance constitutes a violation and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.
- 4.03 **Severability Clause.** The various requirements of this permit shall remain valid in the event of a challenge to any portions of the permit.

Section 5.0 - Permit Reopening Provision.

This General Permit may be reopened, revoked and reissued or terminated during its term, for cause.

Section 6.0 - Applicable Requirements. The following rules shall apply to this installation.

6.01 **Installation Level.** The following are deemed by Missouri DNR to be applicable on an installation-wide basis.

1. General

- a. 10 CSR 10-6.110, Submission of Emission Data, Emission Fees and Process Information
 - (1) Emission Fees: \$25.70 per actual ton of pollutant
 - (2) Record Keeping Requirement: Emission Inventory Questionnaire (EIQ)
 - (3) Monitoring Requirement: None
 - (4) Reporting Requirement: Submit an annual emission inventory on forms, EIQ, furnished by the program by April 1, and shall include emission data, emission fees and process information for the previous calendar year.
- b. 10 CSR 10-6.065, Operating Permits
 - (1) Emission Limitation: None
 - (2) Record Keeping Requirement: None
 - (3) Monitoring Requirement: None
 - (4). Reporting Requirement: Submission of Annual Compliance Report and/or certification
- c. 10 CSR 10-6.060, *Construction Permits Required* (See Section IV of the General Permit/Application for State and local permit numbers and requirements.)
 - (1) Emission Limitation: Varies with "Permit to Construct"

- (2) Record Keeping Requirement: Varies with "Permit to Construct"
- (3) Testing Requirement: Varies with "Permit to Construct"
- (4) Monitoring Requirement: Varies with "Permit to Construct"
- (5) Reporting Requirement: Reporting required by "Permit to Construct"
- d. Open Burning Restrictions
 - 10 CSR 10-2.100 (Kansas City Area)
 - 10 CSR 10-3.030 (Outstate Missouri Area)
 - 10 CSR 10-4.090 (Springfield-Green County Area)
 - 10 CSR 10-5.070 (St. Louis Area)
 - Emission Limitation: No person may conduct, cause, permit, or allow open burning of refuse, for salvage, or trade waste after September 17, 1971. (See specific regulation for exceptions to this limitation.)
 - (2) Compliance Demonstration: Previous DNR inspection reports can be used to demonstrate compliance with this regulation.
 - (3) Record Keeping Requirement: DNR inspection reports
 - (4) Monitoring Requirement: Periodic DNR inspections
 - (5) Reporting Requirement: None
- e. *Time Schedule for Compliance* (**Note**: for Kansas City, Springfield-Greene County, and St. Louis Areas only)
 - 10 CSR 10-2.150 (Kansas City Area)
 - 10 CSR 10-4.140 (Springfield-Green County Area)
 - 10 CSR 10-5.250 (St. Louis Area)

Check one: ☐ Not Applicable ☐ Applicable

- (1) Emission Limitation: This regulation specifies the time schedule for compliance with regulations by new and existing sources. Compliance with the new provisions of this regulation shall be according to the following time schedule:
 - All new installations shall comply as of going into operation; and all existing installations not in compliance as of the effective date; March 25, 1976 for the Kansas City Area, March 25, 1976 for the Springfield-Greene County Area, and March 24, 1967 for the St. Louis Area, shall be in compliance within six (6) months of the effective date.
- (2) Record Keeping Requirement: None
- (3) Monitoring Requirement: None
- (4) Reporting Requirement: Submit to the Director a compliance plan and schedule if not in compliance with this regulation.
- f. 10 CSR 10-6.050, Start-up, Shutdown, and Malfunction
 - (1) Emission Limitation: None
 - (2) Monitoring Requirement: None
 - (3) Reporting Requirement: Provide information to demonstrate that the excess emissions were the consequence of a malfunction, start-up or shutdown. The information to be submitted to the director not later than fifteen (15) days after receipt of the notice of excess emissions shall include, at a minimum, the following:
 - (a) Name and location of installation;
 - (b) Name and telephone number of person responsible for the installation;
 - (c) The identity of the equipment causing the excess emissions;
 - (d) The time and duration of the period of excess emissions;
 - (e) The cause of the excess emissions;
 - (f) The type of air contaminant involved;
 - (g) A best estimate of the magnitude of the excess emissions;
 - (h) The measures taken to mitigate the extent and duration of the excess emissions; and
 - (i) The measures taken to remedy the situation which caused the excess emissions and the measures taken or planned to prevent the recurrence of these situations.
- g. 10 CSR 10-6.130, Controlling Potential Emissions During Episodes of High Air Pollution Potential
 - (1) Emission Limitation: This rule specifies the conditions that establish an air pollution alert (yellow/red), watch or emergency and the associated procedures and emissions reduction objectives for dealing with each.
 - (2) Record Keeping Requirement: None

- (3) Monitoring Requirement: None
- (4) Reporting Requirement: Submission of emergency plan if required by the Director
- h. 10 CSR 10-6.150, Circumvention
 - (1) Emission Limitation: No person shall cause or permit the installation or use of any device or any means which, without resulting in reduction in the total amount of air contaminant emitted, conceal or dilute an emission or air contaminant which violates a rule of the Missouri Air Conservation Commission.
 - (2) Record Keeping Requirement: None
 - (3) Monitoring Requirement: None
 - (4) Reporting Requirement: None
- i. 10 CSR 10-5.040, Use of Fuel in Hand-Fired Equipment Prohibited (Note: for St. Louis Area only)

Check one:	☐ Not Applicable	☐ Applicable

- (1) Emission Limitation: It shall be unlawful to operate any hand-fired fuel-burning equipment in the St. Louis, Missouri metropolitan area. Hand-fired fuel-burning equipment is defined as any fuelburning equipment including, but not limited to, furnaces, heating and cooking stoves and hot water furnaces.
- (2) Compliance Demonstration: Previous DNR inspection reports can be used to demonstrate compliance with this regulation.
- (3) Record Keeping Requirement: DNR inspection reports
- (4) Monitoring Requirement: Periodic DNR inspections
- (5) Reporting Requirement: None

2. **PM**₁₀

- a. 10 CSR 10-6.065, Operating Permits
 - (1) Emission Limitation: Grain receiving and/or feed production limit(s), particulate control device requirement(s), or fuel oil combustion limit(s) as contained in Tables 1, 2, or 3 in Section III, Option C5. of this General Permit/Application
 - (2) Record Keeping Requirement: As required in Sections 8.03 and 9.03 of this General Permit
 - (3) Monitoring Requirement: None
 - (4) Reporting Requirement: As required in Sections 8.04 and 9.04 of this General Permit

3. Visible Emissions

- a. Restriction of Emission of Visible Air Contaminants
 - 10 CSR 10-2.060 (Kansas City Area)
 - 10 CSR 10-3.080 (Outstate Missouri Area)
 - 10 CSR 10-4.060 (Springfield-Green County Area)
 - 10 CSR 10-5.090 (St. Louis Area)
 - (1) Emission Limitation: Opacity of emissions not to exceed or equal 20%
 - (2) Compliance Demonstration: Previous DNR inspection reports can be used to demonstrate compliance with this regulation.
 - (3) Record Keeping Requirement: DNR inspection reports
 - (4) Monitoring Requirement: Visual inspection, EPA Method 9; Performed during periodic DNR inspections
 - (5) Reporting Requirement: None

4. Fugitive Emissions

- a. 10 CSR 10-6.170, Restriction of Particulate Matter to the Ambient Air Beyond the Premises of Origin
 - (1) Emission Limitation: No visible particulate matter in the ambient air beyond property line of origin; or, no particulate matter found on surfaces beyond property line of origin.
 - (2) Compliance Demonstration: Previous DNR inspection reports can be used to demonstrate compliance with this regulation.
 - (3) Record Keeping Requirement: DNR inspection reports
 - (4) Monitoring Requirement: Visual inspection performed during periodic DNR inspections
 - (5) Reporting Requirement: None

5. Odor

- a. Restriction of Odor Emissions
 - 10 CSR 10-2.070 (Kansas City Area)
 - 10 CSR 10-3.090 (Outstate Missouri Area)
 - 10 CSR 10-4.070 (Springfield-Green County Area)
 - 10 CSR 10-5.160 (St. Louis Area)
 - (1) Emission Limitation: This section requires that no person may cause, permit or allow the emissions of odorous matter in concentrations and frequencies or for durations that odor can be perceived when one (1) volume of odorous air is diluted with seven (7) volumes of odor-free air for two (2) separate trials not less than fifteen (15) minutes apart within the period of one (1) hour.
 - (2) Compliance Demonstration: Previous DNR inspection reports can be used to demonstrate compliance with this regulation.
 - (3) Record Keeping Requirement: DNR inspection reports
 - (4) Monitoring Requirement: Periodic DNR inspections
 - (5) Reporting Requirement: None

6.02 Various Grain and Feed Emission Units as Noted Below.

1. Particulate Matter

- a. Restriction of Emission of Particulate Matter from Industrial Processes
 - 10 CSR 10-2.030 (Kansas City Area)
 - 10 CSR 10-3.050 (Outstate Missouri Area)
 - 10 CSR 10-4.030 (Springfield-Green County Area)
 - 10 CSR 10-5.050 (St. Louis Area)
 - (1) Emission Limitation: No person shall cause, suffer, allow or permit the emission of particulate matter in any one (1) hour from any source in excess of the amount determined by the following empirical equations:
 - \leq 30 tons per hour: E = 4.10 X P^{0.67} > 30 tons per hour: E = 55.0 X P^{0.11} 40

where E = emission limit in lbs./hr. and P = max. rated capacity in tons/hr.

- (2) Affected Grain and Feed Industry Emission Units.
 - (a) Grain and/or Feed Industry affected emission units:
 - i. Bin Vents
 - ii. Grain Cleaning (internal operation)
 - (b) Grain Industry affected emission units
 - i. Tunnel Belts (if applicable internal operation)
 - ii. Gallery Belts (internal operation)
 - iii. Headhouse (internal operation)
 - (c) Feed Industry affected emission units
 - i. Receiving
 - ii. Hammermilling
 - iii. Flaking
 - iv. Cracking
 - v. Pellet Cooling
 - vi. Shipping
- (3) Compliance Demonstration:
 - (a) Feed Mill. For a feed mill the "worst case" emission unit is pelleting with a standard cyclone. The emission factor is 0.433 pound of PM per ton of feed. The "worst case" process rate is about 60 tph. If the highest rate for which compliance can be shown is greater than or equal to 60 tph, then 60 tph is obviously in compliance:

For P = 123 tph, E = 53.38 lbs/hr and ER = 123 tph X 0.433 lb/ton = 53.26 lbs/hr

The highest process rate for which compliance can be demonstrated is 123 tph. Therefore, the pelleting process at 60 tph, which is less than 123 tph, is in compliance. Since the "worst case" emission unit is in compliance, all other emission units at a feed mill are in compliance with this rule as well.

(b) Grain Elevator. For a grain elevator the "worst case" emission unit is the headhouse at a large elevator. The emission factor is 0.087 pound of PM per ton of grain received as taken

from AP-42, Section 9.9.1. A mixed grain "dustiness" factor of 1.95 is considered as well. The "worst case" process rate is about 348 tph (approximately 12,000 bu/hr). If the highest rate for which compliance can be shown is greater than or equal to 348 tph, then 348 tph is obviously in compliance:

For P = 388 tph, E = 65.96 lbs/hr and ER = 388 tph X 0.087 lb/ton X 1.95 = 65.82 lbs/hr

The highest process rate for which compliance can be demonstrated is 388 tph. Therefore, the headhouse at 348 tph, which is obviously less than 388 tph, is in compliance. Since the "worst case" emission unit is in compliance, all other emission units at a grain elevator are in compliance with this rule as well.

Previous DNR inspection reports can be used along with the above to demonstrate compliance with this regulation along with source verification of emissions as noted in (5) below.

- (4) Record Keeping Requirement: DNR inspection reports
- (5) Monitoring Requirement: Periodic DNR inspections and source verification that the emissions are maintained at levels less than or equal to the values shown in the above compliance demonstration.
- (6) Reporting Requirement: None
- b. 10 CSR 10-6.070, Subpart DD, (40 CFR part 60), Standards of Performance for Grain Elevators. (See instructions and application form.)

Ch	eck one:	☐ Not Applicable ☐ Applicable
(1)		cilities and Emission Limitations (Check the appropriate "yes" or "no" blank indicating of this rule to an affected facility.)
	(b)	The following affected facilities are limited to 5% opacity: Truck unloading station Railcar unloading station Railcar loading station
	(d)	The following affected facility is limited to 10% opacity: Truck loading station
	(e)	The following affected facility is limited to 20% opacity: Barge or ship loading station The following affected facility is limited to 0% opacity: (f) Grain dryer:
		 i. Column dryer with column plate perforations > 2.4 mm diam. or ii. Rack dryer in which exhaust gases pass through a screen filter coarser than 50 mesh
	The	e following affected facilities are limited to 0% opacity and 0.023 g/dscm (ca. 0.01gr/dscf):
	(h)	Bucket elevators or legs (excluding legs used to unload barges or ships) Scale hoppers and surge bins (garners)
	(j)	Turn heads Scalpers
	(l)	Cleaners Trippers
	,	Headhouse and other such structures The following affected facility is required to be operated as set forth below: Barge or ship unloading station. The owner or operator of any barge or ship
	('')	unloading station shall operate as follows:

- The unloading leg shall be enclosed from the top (including the receiving hopper) to the center line of the bottom pulley and ventilation to a control device shall be maintained on both sides of the leg and the grain receiving hopper.
- ii. The total rate of air ventilated shall be at least 32.1 actual cubic meters per cubic meter of grain handling capacity (ca. 40 ft³/bu).

- (2) Compliance Demonstration: Test results of performance testing specified in 40 CFR 60.303 and previous DNR inspection reports can be used to demonstrate compliance with this regulation.
- (3) Record Keeping Requirement: None
- (4) Monitoring Requirement: Testing as specified in 40 CFR 60.303 shall be conducted on or after the sixtieth day after achieving a maximum production rate, but not later than 180 days after initial
- (5) Reporting Requirement: The results of the testing shall be reported within 30 days of the completion of the testing.

Dryers/Boilers 6.03

 Particu 	late l	Matter
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			Check	one:	☐ Not	Applicable	☐ Applic	able		
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		(b)	Outsta	te Misse	ouri Area:	:				
			Check	one:		Not Applicable	□ A _l	oplicable		
			1) 2) 3) ii. Ne 1) 2) 3)	Heat i Heat i Heat i ew - Cor Heat i Heat i Heat i	nput rate nput rate nput rate mmenced nput rate nput rate nput rate	between 10 MMI 10,000 MMBTU/ after April 3, 197 10 MMBTU/hr or between 10 MMI 2000 MMBTU/hr	ss, Emission BTU/hr and hr or more 71 · less, Emis BTU/hr and	on Limit = 0.60 lbs d 10,000 MMBTU, , Emission Limit = ssion Limit = 0.60 d 2000 MMBTU/h	/hr, E = 0.90 X Q ^{-0.174} = 0.18 lbs/MMBTU/hr. 0 lbs/MMBTU/hr.	
		(c)	Spring	field-Gr	een Cour	nty Area:				
			Check	one:		Not Applicable		☐ Applicable		
			1) 2) 3)	Heat i	nput rate	between 10 MMI	3TU/hr and		lbs/MMBTU/hr. /hr, E = 1.02 X Q ^{- 0.223} = 0.12 lbs/MMBTU/hr	

Where E = particulate emission rate in Lbs./MMBTU/hr and Q = the dryer or boiler rated heat input in MMBTU/Hr

13

(2) Compliance Demonstration: The "worst case" unit for either a grain elevator or feed mill is a 10 MMBTU/hr boiler fired with #5 fuel oil, which has a TSP emission factor of 10 lbs/1000 gal. The PM emission limit is 0.60 lb/MMBTU/hr. If while burning #5 fuel oil in the "worst case" boiler the PM ER is < 0.60 lb/MMBTU/hr, then all boilers and dryers at all grain and feed installations are in compliance.

ER = (10 lbs/1000 gal) X (1 gal/150000 BTU) X (10 MMBTU/hr) X (1/10 MMBTU) = 0.07 lbs/MMBTU/hr < 0.60 lbs/MMBTU/hr

Therefore, all indirect heating units at grain and feed installations are in compliance. Previous DNR inspection reports can be used along with the above to demonstrate compliance with this regulation along with source verification of emissions as noted in e. below.

- (3) Record Keeping Requirement: DNR inspection reports
- (4) Monitoring Requirement: Periodic DNR inspections and source verification that the emissions are maintained at levels less than or equal to the values shown in the above compliance demonstration.
- (5) Reporting Requirement: None

2. **SO**₂

- Restriction of Emissions of Sulfur Compounds from Indirect Heating Sources a.
 - 10 CSR 10-2.200 (Kansas City Area)
 - 10 CSR 10-3.150 (Outstate Missouri Area)
 - 10 CSR 10-4.190 (Springfield-Green County Area)
 - 10 CSR 10-5.110 (St. Louis Area)
 - (1) Emission Limitation: Applies to installations in which fuel is burned for the primary purpose of producing steam, hot water or hot air or other indirect heating of liquids, gases or solids and in the course of doing so, the products of combustion do not come into direct contact with process materials.

(a) Kansas City Area, Outstate Missouri Area, and Springfield-Greene County Area (Outstate

- Missouri is all of Missouri except for Kansas City, Springfield-Greene County, and St. Louis Areas): ☐ Applicable Check one: ☐ Not Applicable For indirect heating sources > 350,000 BTU/hr actual heat input: No person shall cause or allow emissions of sulfur dioxide into the atmosphere from any indirect heating source in excess of eight (8) pounds of sulfur dioxide per MMBTU actual heat input averaged on any three (3) hour basis.
- (b) St. Louis Area:

i.	For indirect heating sources ≥ 2,000 MMBTU/hr actual heat input:
	No person shall cause or allow emissions of sulfur dioxide into the atmosphere from a

indirect heating source in excess of 2.3 pounds of sulfur dioxide per MMBTU actual heat input averaged on any three (3) hour basis.

Check one: □ Not Applicable □ Applicable

- For indirect heating sources < 2,000 MMBTU/hr actual heat input: No person shall burn or permit the burning of any fuel oil containing more than two percent (2%) sulfur during the months of October, November, December, January, February and March each year, otherwise the limit shall be four percent (4%) sulfur. Unless the installation can show that the emissions of sulfur dioxide from the installation into the atmosphere will not exceed 2.3 pounds per MMBTU of heat input.
- (2) Compliance Demonstration: The "worst case" unit for either a grain elevator or feed mill is a 10 MMBTU/hr boiler fired with #5 fuel oil, which has a SO₂ emission factor of "159 X Sulfur Content (%)"/1000 gal and "worst case" sulfur content of 2%. In reality, it will be no higher than 1.5%. The SO₂ emission limit is 8.0 lb/MMBTU/hr. For the St. Louis area, the most restrictive limit is a 2% limit on fuel oil sulfur content which will be the highest content for this boiler. If while burning #5 fuel oil in the "worst case" boiler the SO₂ ER is \leq 8.0 lb/MMBTU/hr, then all boilers and dryers at all grain and feed installations are in compliance.

ER = ((159 X 2) lbs/1000 gal) X (1 gal/150000 BTU) X (10 MMBTU/hr) X (1/10 MMBTU)

= 2.12 lbs/MMBTU/hr < 8.0 lbs/MMBTU/hr

Therefore, all indirect heating units at grain and feed installations are in compliance. Even if the sulfur content were 4%, the "worst case" boiler would still be in compliance, except for 6 months out of the year in the St. Louis Area:

ER = ((159 X 4) lbs/1000 gal) X (1 gal/150000 BTU) X (10 MMBTU/hr) X (1/10 MMBTU) = 4.24 lbs/MMBTU/hr < 8.0 lbs/MMBTU/hr

Previous DNR inspection reports can be used along with the above to demonstrate compliance with this regulation along with source verification of emissions as noted in e. below.

- (3) Record Keeping Requirement: DNR inspection reports

3.

(5)		ned at levels less than or equal to the values shown in the above compliance demonstration. ng Requirement: None
	10 CSR	R 10-5.120, <i>Information on Sales of Fuels to be Provided and Maintained</i> St. Louis Area installations <u>only</u> that receive deliveries of residual fuel oil grade Nos. 4, 5
	Check	one: ☐ Not Applicable ☐ Applicable
	(2) Red con pre the and reta (3) Moi (4) Rep deli	cord Keeping Requirement: Every delivery of residual fuel oil when first delivered to a assumer or wholesaler in the St. Louis metropolitan area must be accompanied by a ticket pared in triplicate and containing at least the name and address of the seller and the buyer and source of the fuel. One (1) copy of each ticket shall be kept by the person delivering the fuel to be retained for one (1) year; and one (1) copy is to be given to the recipient of the fuel to be ained for one (1) year. nitoring Requirement: Periodic DNR inspections porting Requirement: Upon request, within thirty (30) days after delivery of the fuel, the ivering party shall mail one (1) copy to the Air Conservation Commission.
		ocal Rules. Kansas City Health Department, Air Quality Section, Chapter 18, Article III - Air ter 8, Air Quality)
ck (one:	□ Not Applicable □ Applicable
tion tion tion tion tion tion tion tion	8-5. 8-6. 8-7. 8-8. 8-9. 8-10. 8-11. 8-12. 8-15. 8-16. 8-17. 8-18.	Open Burning Emission of Particulate Matter Emission of Sulfur Compounds Emission of Odors Emission of Volatile Organic Compounds Emission of Hazardous Air Pollutants Review of New Sources and Modifications; Permit for Construction or Major Modification Permit to Operate Dilution of Emission Emissions Resulting from Uncontrollable Force or Malfunctions Actionable Rights; Violations Declared Public Nuissance Emergency Conditions Control of Emissions During Periods of High Air Pollution Potential Penalty for Violation of Chapter
	Ger a. asas ution tion tion tion tion tion tion tion	(5) Reporting Re

6.05 Springfield-Greene County Local Rules. Springfield-Greene County, Air Pollution Control Authority, Chapter 2A - Air Pollution Control Standards

Check one: ☐ Not Applicable ☐ Applicable

Article III Approval of Planned Installations

Fees

Section 8-19. Section 8-20.

6.04

	Article X Article XI Article XII Article XIII Article XVI Article XVII Article XVIII	Restriction of Emission of Visible Air Contaminants from Equipment Emission of Particulate Matter from Fuel Burning Equipment Restriction of Emission of Particulate Matter from Industrial Processes Open Burning Control of Odors in the Ambient Air Nuisances Because of Air Pollution Submission of Information Variance Provisions Breakdown of Equipment Circumvention Service of Orders or Notices Enforcement of This Chapter
6.06		ounty Local Rules. St. Louis County Department of Health, Air, Land & Water Branch, Air ontrol Section, Chapter 612 - Air Pollution Control Code
	Check one	Not Applicable ☐ Applicable
	612.100 612.110 612.120 612.130 612.140 612.150 612.160 612.170 612.180 612.200 612.210 612.220 612.220 612.230 612.240 612.250 612.250 612.260 612.270 612.280 612.290 612.310 612.340 612.340 612.370 612.380 612.390 612.400	Emergency Abatement of Violation - Procedure Permits Required Permits to be Visibly Affixed or Placed Permit to Sell or Rent Transfer Permit to Operate - When Required General Requirements for Applications for Authority to Construct and Operating Permits Information Required for Application for Permits Standards for Granting Permits Cancellation of Authority to Construct Testing Prior to Granting of Operating Permits Action on Application for Permits Suspension or Revocation of Permits Suspension of Revocation of Operating Permits or Authority to Construct, Board Hearing, Stay of Action Surrender of Permits Fees, When Payable, Exceptions Permit Fees; Schedules Permit Fees; Refund Testing by Order of the Board Right of Entry; Inspections; Samples Variances Upset Conditions, Breakdown, or Scheduled Maintenance Service of Notice Air Pollution Nuisances Prohibited False or Misleading Oral Statements; Unlawful Reproduction or Alteration of Documents Interfering with or Obstructing Division Personnel Penalties for Violation Construction
6.07	City of St.	Louis Local Rules. City of St. Louis, Division of Air Pollution Control
	Check one	: ☐ Not Applicable ☐ Applicable
	Section 17 Section 18 Section 19 Section 21 Section 22 Section 23	When Emissions of Pollutants Become a Nuisance Registration of Sources of Air Pollutants Permits for Fuel or Refuse Burning Equipment Labels to be Affixed to Approved Installations Commissioner to Approve Plans and Issue Permits Amended by 55293 Commissioner May Enter Premises Penalty Clause

Option C 16 Revised April 23, 1996 General Permit/Application

		dinance 55293: ction 1 Amendment of Section 22 of 50163 - Fees
	Orcc Sec Sec Sec Sec Sec Sec Sec Sec Sec Sec	ction 1 Amendment of Section 22 of 50163 - Fees dinance 59270: ction 8 Maximum Allowable PM from Indirect Heating ction 9 Use of Hand Fired Equipment Prohibited ction 10 Amended by 60023 ction 12 Open Burning Restrictions ction 14 Restriction of Emissions of Visible Air Contaminants ction 15 Preventing Air Contaminants from Becoming Air-borne ction 16 Restriction of the Emission of SO ₂ from Use of Fuel ction 17 Importation, Sale, Transportation, Use of Certain Coals ction 18 Information on Sales of Fuels to be Provided and Maintained ction 20 Control of Odors in the Ambient Air ction 22 Air Pollution Nuisances Prohibited ction 33 Rules for Controlling Emissions During Periods of High Air Pollution ction 34 Rules for Controlling Emissions of Air Contaminants ction 37 Upset Conditions, Breakdown or Scheduled Maintenance ction 39 Permits and Inspection Fees ction 40 Rules Governing Sources in Non-Attainment Areas and PSD in Attainment Areas ction 41 Alternate Emission Limits ction 42 Enforcement ction 43 Right of Inspection and Disclosure of Production Data ction 44 Confidentiality of Records
	Sed Sed Sed Sed Sed	ction 45 Cooperation Required ction 46 Circumvention ction 47 Continuation ction 48 Penalty Clause ction 49 Severability ction 50 Emergency Clause
	Sed Sed Sed Sed	dinance 60023: ction 1 Amendment of Section 10 of Ordinance 59270 - Restriction of PM from Industrial Processes ction 5 Amended by 60629 ction 10 Continuation ction 11 Penalty Clause ction 12 Severability
	Sec Sec	dinance 60629: ction 2 Amendment of Section 5 of Ordinance 60023 - New Performance Standards Adopted ction 6 Continuation ction 7 Penalty Clause ction 8 Severability
7.0) - P	Pollution Control Requirements
	The	e permittee shall limit emissions by the operation of control equipment required by the following:
	1.	Present Particulate Control Device Requirements contained in "Permits to Construct" issued by the permitting authority as noted in Table A in Section IV - Present Permit Conditions.
		Check one: ☐ Not Applicable ☐ Applicable
	2.	New particulate control device requirements to qualify this installation as an "Intermediate State Installation" as contained in Table 2 in Section III Option C5. (This control would have been noted in the "emission worksheet.")
		Check one: ☐ Not Applicable ☐ Applicable

Section

7.01

7.02 All required particulate control devices noted in Table A in Section IV and Table 2 in Section III Option C5. shall be implemented upon the respective emission units at all times that the units are in operation. When control devices are operated, they shall be operated in accordance with the following, if applicable:

1. Oil-based dust-suppression system.

- a. An oil-based dust-suppression system shall be designed, maintained and operated to apply as the minimum one and one-half (1.5) gallons of mineral or refined soybean oil per one thousand (1000) bushels of grain; once grain is oiled, control factors for oil-based dust-suppression may be applied in all further emission units through which the grain passes if a record of oiling is maintained.
- b. Control factors for oil-based dust-suppression, if oil is applied in accordance with a. above, may be allowed at another plant or source if a copy of all records of such oiling is transmitted with the grain.
- c. Records of the monthly ratio of oil applied to grain oiled in gallons per 1000 bushels of grain shall be kept, along with the calculation resulting in this ratio.

2. Fabric filter (baghouse) system.

- a. A fabric filter (baghouse) system shall be designed, maintained and operated to ensure optimal efficiency in the removal of PM₁₀.
- b. The baghouse shall be equipped with a gauge or meter which indicates the pressure drop across the baghouse.
- c. Records of maintenance performed on the baghouse system shall be kept, including bag replacement and dates of replacement.
- d. Replacement bags shall be kept on hand at all times.

☐ Not Applicable

3. Cyclone system.

- a. A cyclone system shall be designed, maintained and operated to ensure optimal efficiency in the removal of PM₁₀.
- b. Records of maintenance performed on the cyclone system shall be kept.

Section 8.0 - Production or Processing Limits.

		it emissions by limiting t produced to the followin	he quantity of grain and/or other feed ingredients received or quantity og:
8.01	Existing grain receiving, processing or feed production Permit limits established by permit conditions contained in "Permits to Construct" issued by the permitting authority as noted in Table B (for Intermediate State Installations) in Section IV - Existing Permit Conditions.		
	Check one:	☐ Not Applicable	☐ Applicable
		tuation in which both t to this installation.	this Section 8.01 and 8.02 apply, the more restrictive limit shall
8.02	New grain receiving and/or feed production limits required to qualify this installation as an "Intermedestate Installation" as contained in Table 1 in Section III Option C5. (This limit would have been indicate "emission worksheet.")		
	Check one:	☐ Not Applicable	☐ Applicable
8.03	Grain receivin	ng and/or production re	ecord keeping.
	NOTE: This s	ubsection shall apply	only if Section 8.01 or 8.02 is applicable.

Check one:

☐ Applicable

Monthly records of grain received or processed, or feed produced or processed, whichever is applicable, shall be kept in order to demonstrate compliance with limits established in Sections 8.01 and 8.02. Records shall also be kept to demonstrate totals for each twelve-month (12-month) rolling period.

8.04	Grain receiving and/or production reporting.			
	NOTE: This s	ubsection shall apply	only if Section 8.01 or 8.02 is applicable.	
	Check one:	☐ Not Applicable	☐ Applicable	
	the end of each		Pollution Control Enforcement Section, no later than ten (10) days after cumulative total records show that the source exceeded the limitation	
Section 9.0) - Fuel Combu	stion Limits .		
The pe	rmittee shall limi	it amounts and types of	fuel combusted as follows:	
9.01			olished by permit conditions contained in "Permits to Construct" issued Table C in Section IV - Present Permit Conditions.	
	Check one:	☐ Not Applicable	☐ Applicable	
	NOTE: In a situation in which both this Section 9.01 and Section 9.02 apply, the more restrictive lines shall apply to this installation.			
9.02	New Fuel Oil Combustion Limit(s) required to qualify this installation as an "Intermediate State Installation as contained in Table 3 in Section III Option C5. (This limit would have been indicated in the "emission worksheet.")			
	Check one:	☐ Not Applicable	☐ Applicable	
9.03	Fuel Combust	ion Recordkeeping.		
	Note: This subsection shall apply only if Section 9.01 or 9.02 applies.			
	Check one:	☐ Not Applicable	☐ Applicable	
	Monthly records of fuel(s) combusted and other fuel data, if applicable, shall be kept in order to demonstrate compliance with limits established in Sections 9.01 and 9.02. Records shall also be kept to demonstrate the total(s) for the previous twelve-month (12-month) period.			
9.04	Fuel Combustion Reporting.			
	NOTE: This subsection shall apply only if Section 9.01 or 9.02 is applicable.			
	Check one:	☐ Not Applicable	☐ Applicable	
	the end of each		Pollution Control Enforcement Section, no later than ten (10) days after cumulative total records show that the source exceeded the limitation	

Section 10.0 - Records Retention

- 10.01 All record keeping must be retained at the installation for a minimum period of five (5) years, and shall be made available immediately to representatives of the permit authority upon verbal request.
- 10.02 The permittee shall maintain a copy of this permit at this installation. A copy of this permit shall be placed onfile at each approved source no later than 30 days after the date of the letter of transmittal.

Section 11.0 - Inspection and Entry

- 11.01 The permittee shall allow authorized representatives of the permitting authority to perform the following:
 - 1. Enter upon the permittee's premises where the Basic or Intermediate State source or activity is located or conducted, or where records must be kept under the conditions of this permit;
 - 2. Have access to and copy at reasonable times any records that must be kept under the conditions of this permit;
 - 3. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operation regulated or required under this permit; and
 - 4. Sample or monitor any substances or parameters at any location, during operating hours, for the purpose of assuring permit compliance.
- 11.02 No person shall obstruct, hamper, or interfere with any such authorized representative while in the process of carrying out her/his official duties. Refusal of entry or access may constitute grounds for permit revocation and enforcement action.